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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,655	07/27/2001	Robert S. Horen	A-69479/RMA	8491

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EXAMINER

TRAN, NGHI V

ART UNIT	PAPER NUMBER
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2151

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No. 09/916,655	Applicant(s) HOREN ET AL.	
	Examiner Nghi V. Tran	Art Unit 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 55-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24, 55-66 and 68-79 is/are rejected.
- 7) ☒ Claim(s) 67 and 80 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on November 15, 2006. Claims 1, 17, and 24 have been amended. Claims 25-54 have been canceled. Claims 55-80 have been added. Therefore, claims 1-24 and 55-80 are presented for further examination.

Claim Objections

2. Claim 1 is objected to because of the following informalities: In line 13, "he media" is understood as --the media--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4, 7-10, 12-14, 17, 19, 23, 55-59 and 68-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Day et al., U.S. Patent No. 5,996,025 (hereinafter Day), in view of Ma et al., United States Patent Number 5,926,646 (hereinafter Ma).

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5. With respect to claims 1, 17, 55-59, and 68-72, Day teaches or suggests a server computer [e.g. control server **40**] for use in a computer network [**30**] having at least one client computer [e.g. client application server **20**], the server computer characterized in that the server computer:

- sends media assets [e.g. assets are digital multimedia content resources, col.3, lns.59-60] over said computer network to said client computer [col.3, lns.4-23],
- the server computer coupled to at least one file system [e.g. storage & distribution **64**] organized into a plurality of asset groups [col.3, ln.59 – col.4, ln.34],
- each asset group comprising at least one media asset [e.g. organizing assets into asset groups, col.3, ln.63],
- all media assets within an asset group sharing a quota of system resources including storage medium bandwidth resources and storage medium space resources on the server computer that is reserved for the asset group [i.e. bandwidth is also reserved for different assets, col.6, lns.10-12 and col.6, ln.56] on a per-asset-group basis rather than on a per-asset basis, and
- the asset group and the at least one media asset in the asset group being placed within the at least one file system which in combination guaranteeing a specified number of simultaneous playouts for each media asset within the asset group [col.5, ln.4 – col.5, ln.33 and col.6, lns.6-24].

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However, Day does not explicitly show an asset group placement policy for placing the asset group which determines the resource quota for the asset group.

In a multimedia distribution system, Ma discloses or suggests an asset group placement policy for placing the asset group which determines the resource quota for the asset group [col.10, ln.43 through col.12, ln.14].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Day in view of Ma by placing the asset group which determines the resource quota for the asset group in an asset group placement policy because this feature provides multimedia data delivery to a large number of clients [Ma, col.6, lns.39-42]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to maximize the number of simultaneously supported multimedia streams [Ma, col.6, lns.22-24].

6. With respect to claims 4 and 19, Day further teaches wherein the asset group is limited to a maximum bit rate [i.e. maxScale, see "Stream Operations" table] at which any single media asset belonging to the asset group can be played out, further comprising an attribute [i.e. msAssetGrpAttr_t, see "Asset Management" table] which indicates the maximum bit rate [col.15, ln.18 – col.16, ln.19].

7. With respect to claims 7 and 21, Day further teaches an asset group policy placement module [i.e. asset management] that places an asset group within the file system [col.3, ln.59 - col.4, ln.14 and see "Asset Management" table].

8. With respect to claims 8 and 22, Day further teaches the asset group policy module distributes the asset group across multiple file systems [col.4, Ins.4-9].

9. With respect to claim 9, Day further teaches a media asset placement policy module that places media assets within the asset group [col.3, ln.59 - col.4, ln.14 and see "Asset Management" table].

10. With respect to claims 10 and 23, Day further teaches the media asset placement policy module places media assets within asset groups based on said reserved storage medium bandwidth and storage space [col.6, Ins.6-25 and col.4, Ins.4-9].

11. With respect to claim 12, Day further teaches wherein said media asset includes an asset selected from the set consisting of audio, text, graphics, image, symbol, video, information item or token, and combination thereof [col.5, Ins.34-37].

12. With respect to claim 13, Day further teaches wherein said media asset comprises an audio, a video, or an audio-video media asset [col.5, Ins.34-37].

13. With respect to claim 14, Day further teaches wherein said server computer comprises a mass storage subsystem [col.5, Ins.34-37 and col.4, Ins.44-59] and said file

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system organized into said plurality of asset group is defined in said mass storage subsystem [col.4, lns.4-14].

14. With respect to claims 15 and 16, Day further teaches wherein said mass storage subsystem comprises at least one hard disk drive [col.4, lns.4-9].

15. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Day et al., U.S. Patent No. 5,996,025 (hereinafter Day).

16. With respect to claim 2, Day does not explicitly show each media asset belongs to only one asset group. However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify each media asset belongs to only one asset group because this feature avoids the conflict among the asset groups. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to optimize multimedia content loading and data streaming to users in a distributed computer system for multimedia serving.

17. Claims 3, 5-6, 11, 18, 20, 24, 60-63, 64-66, and 73-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Day in view of Ma as applied claims 1 and 17 above, in view of RealNetworks, "RealServer Administration Guide", <http://service.real.com/help/library/guides/g270/realsvr.htm> (hereinafter Administration).

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18. With respect to claims 3, 18, 65, and 78, Day does not explicitly show the asset group is limited to a maximum number of simultaneous payouts for the media assets contained within the asset group and further comprises an attribute that designates the number of simultaneous payouts.

In a communication system for multimedia serving, Administration suggests or discloses the asset group is limited to a maximum number of simultaneous payouts for the media assets contained within the asset group and further comprises an attribute that designates the number of simultaneous payouts [pages 209-211].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Day in view of Administration by limiting the asset group to a maximum number of simultaneous payouts because this feature enables the server to lower threshold of the connections. One of ordinary skill in the art at the time of the invention would have been motivated to modify in order to avoid bottleneck and system crash.

19. With respect to claims 5, 60, 64, and 73, Day does not explicitly show the asset group is associated with a guaranteed possible payouts value that guarantees the number of payouts from each asset belonging to the asset group assuming no other asset is being played out at the same time, further comprising an attribute which indicates the guaranteed possible payouts value.

In a communication system for multimedia serving, Administration suggests or discloses the asset group is associated with a guaranteed possible payouts value that

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guarantees the number of playouts from each asset belonging to the asset group assuming no other asset is being played out at the same time, further comprising an attribute which indicates the guaranteed possible playouts value [pages 209-211].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Day in view of Administration by associating the asset group with a guaranteed possible playouts value because this feature increases QoS such as reliability. One of ordinary skill in the art at the time of the invention would have been motivated to modify in order to avoid bottleneck or system crash at any given time.

20. With respect to claims 6, 20, 24, 61-63, 66, 74-77, and 79, Day does not explicitly show a default guaranteed possible playouts value.

In a communication system for multimedia serving, Administration discloses a default guaranteed possible playouts value [pages 209-211 i.e. "If it is 0 or blank, RealServer uses the number of streams specified by your license"].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Day in view of Administration by adding a default guaranteed possible playouts value because this feature increases QoS such as reliability by automatically setting possible playout value when it has not been setting yet. One of ordinary skill in the art at the time of the invention would have been motivated to modify in order to avoid bottleneck or system crash when users forgot to set the guaranteed possible playouts value.

21. With respect to claim 11, Day does not explicitly show the media asset placement policy module restricts the placement domain of the domain of the media asset to the asset group distribution of storage space and storage bandwidth.

In a communication system for multimedia serving, Administration discloses restricts the access to content by limiting the amount of bandwidth that can be in use and limiting the number of clients that can connect [chapter 14].

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify Day in view of Administration by restricting the placement domain of the domain of the media asset to the asset group distribution of storage space and storage bandwidth because this feature uses to load balancing the bandwidth. One of ordinary skill in the art at the time of the invention would have been motivated to modify in order to share the bandwidth among the asset groups.

Allowable Subject Matter

22. Claims 67 and 80 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

23. Applicant's arguments with respect to claims 1-24 and 55-80 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V. Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

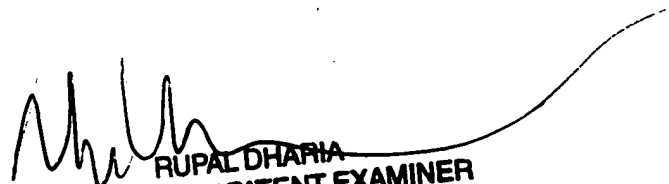
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi Tran
Patent Examiner
Art Unit 2151

February 15, 2007


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER